IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Xiong Zhang et al. **Attorney Docket: 61472-0269224**
Serial No.: 09/700,236 **Art Unit: 1765**
Filed: May 9, 2001 **Examiner: Song, Matthew J.**
For: CRYSTAL GROWTH METHOD FOR GROUP-III NITRIDE AND RELATED COMPOUND SEMICONDUCTORS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT TRANSMITTAL

1. Transmitted herewith is an amendment for this application. Please acknowledge receipt of these materials by stamping the date on the enclosed, self-addressed card.

STATUS

2. Applicant is a small entity.

EXTENSION OF TIME

3. (a) ☒ Applicant petitions for an extension of time under 37 CFR 1.136 for the total number of months checked below:

	Extension (months)	Fee for other than small entity	Fee for small entity
☐	one month	$ 110.00	$ 55.00
☐	two months	$ 420.00	$ 210.00
☒	three months	$ 950.00	$ 475.00
☐	four months	$1,480.00	$ 740.00
☐	five months	$2,010.00	$ 1,005.00

Fee $475.00

If an additional extension of time is required please consider this a petition therefor.

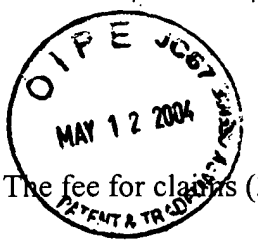
☐ An extension for months has already been secured and the fee paid therefor of $ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request $475.00

CERTIFICATE OF MAILING

I, Diana Dearing, hereby certify that this paper (along with any items referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: May 6, 2004 Diana Dearing



FEE FOR CLAIMS

4. The fee for claims (37 CFR 1.16(b)-(d)) has been calculated as shown below:

	(Col. 1)		(Col. 2)	(Col. 3)	SMALL ENTITY			OTHER THAN A SMALL ENTITY		
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADD'L FEE	OR	RATE	ADD'L FEE	
TOTAL		MINUS		=	x 9 =	$			x18 =	$
INDEP.		MINUS		=	x 40 =	$			x80 =	$
☐ FIRST PRESENTATION OF MULTIPLE DEP. CLAIM + 135 =				$	+270	$				
				TOTAL ADD'L FEE $			*OR*	TOTAL ADD'L FEE $		

(a) ☒ No additional fee for claims required.
(b) ☐ Total additional fee for claims required $.

FEE PAYMENT

5. ☒ Attached is a check in the sum of $475.00.

☐ Charge Account No. 502213 the sum of $.
A duplicate of this transmittal is attached.

FEE DEFICIENCY

6. ☒ If any additional extension and/or fee is required, charge Account No. 502213.

Date: May 6, 2004

David H. Jaffer
Reg. No. 32,243
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1765

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AMENDMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This paper is submitted in response to the Office Action mailed November 6, 2003.

In The Claims

Please amend the claims as follows:

1. (Currently amended) A crystal growth method for the group-III nitride compound semiconductors, comprising:

forming a MOCVD-grown periodic or non-periodic ~~inactive~~ amorphous or polycrystalline intermediate multi-layered buffer having at least three layers with each layer having a thickness in the range from 2 nm to 6 nm on a substrate at a first temperature in which the layers alternate between at least two types of compound semiconductors A and B different from each other in lattice constant, energy band gap, layer thickness, and composition; and

forming a MOCVD-grown layer of a group-III nitride compound semiconductor on the formed ~~inactive~~ intermediate multi-layered buffer, wherein said layer of a group-III nitride is formed at a temperature higher than said first temperature and said intermediate multi-layered buffer adjoins both said layer of group-III nitride compound and said substrate, whereby said intermediate multi-layered buffer partially recrystalizes at said higher temperature, thereby relieving lattice strain between said layer of group-III nitride compound and said substrate, and facilitating improved crystalline quality of said group-III nitride compound.

2. (Previously amended) A crystal growth method according to claim 1, further comprising doping a n- or p-type in said group-III nitride compound semiconductor.